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ABSTRACT

This manual for district and school health personnel contains guidelines to facilitate the planning and implementation of vision screening programs in California public schools so that all students may benefit from optimal use of their sense of sight. The major program objectives, the legal basis, minimum requirements, and authorized personnel are listed. A chart describes equipment needs and arrangement, room requirements, testing procedures, and recording and referral processes for the Snellen Test, the Color Perception Test, and additional procedures. As teacher observation is important in detecting suspected vision problems, signs and symptoms are given. Specific systematic follow-up procedures are suggested. Program implementation checklists for the administrator and the vision screener are included. A section on procedures for screening nonliterate, nonverbal, non-English-speaking, and/or very young children with special needs contains special considerations, suggestions for test administration, and specific aids that may be helpful. A glossary and selected references are included. The appendices contain: Vision Screening Rechecks and Report of Eye Examination forms; addresses for screening aids; sections from the "California Administrative Code, Title 5, Education" on vision screening; and a draft of the proposed addition to the code. (BS)

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A GUIDE FOR VISION SCREENING

IN CALIFORNIA PUBLIC SCHOOLS

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CALIFORNIA STATE DEPARTMENT OF EDUCATION
Bill Honig, Superintendent of Public Instruction
Sacramento, 1984

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**A
GUIDE
FOR VISION
SCREENING**

IN CALIFORNIA PUBLIC SCHOOLS





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Preface

One of the goals of society, and certainly of the schools, is to teach people to appreciate life and to attain the highest level of achievement possible. We in education have a special responsibility to teach children the importance of their lives and of the senses which have been given to them to perceive life.

We also have a responsibility to ensure, to the degree possible, that the children under our care are not handicapped in the use of their senses, especially if the handicapping conditions can be eliminated or corrected. Therefore, if a child's sense of touch, smell, taste, hearing, or sight is impaired, we must do what we can to help that child correct or compensate for the loss. To help the child, we must first identify what the losses may be.

In 1947 the California Legislature enacted a law which required school districts in the state to screen the vision of pupils in selected grades. Since the ability to see is vital to learning, the appropriateness of the requirement is evident. It is acknowledged that schools have a responsibility to ensure that pupils are in the best possible state of health to enable them to profit from educational offerings. Therefore, vision screening programs, conducted under appropriate conditions and by properly qualified personnel, have been designed to ensure that pupils have the visual acuity to participate fully in those learning processes.

In preparing this guide for the schools in California, we sought the assistance and advice of many people who were knowledgeable and experienced in implementing high-quality vision screening programs in the schools, and we are very grateful for their valuable assistance. They are identified in the acknowledgments on page v.

We hope that this guide will provide a service to help ensure that the children enrolled in California schools obtain optimal use of their sense of sight.

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Introduction

California public schools offer equal educational opportunities for all and make it possible for all to profit from them to the full extent of their potential. This effort involves making provisions for each pupil to be free of physical handicaps, if possible, and to keep the effects of physical handicaps to a minimum if the conditions causing the handicaps cannot be corrected. This help includes making certain that every child who is in any way handicapped by poor vision is identified and that the necessary steps are taken to eliminate the cause of the handicap; or, if elimination is impossible, to keep to a minimum the effects of the handicap. The schools play a most important role in helping to identify pupils with certain vision handicaps by conducting vision screening programs that are well-planned and well-operated.

The purpose of this publication, *A Guide for Vision Screening in California Public Schools*, is to provide district and school health personnel with one document that contains guidelines for a vision screening program and the laws and regulations which govern it. The guidelines will facilitate the planning and implementation of programs for assessment of vision so that all children and youths in California public schools may benefit from optimal use of their sense of sight throughout their school years.

The publication is divided into three sections: (1) Introduction; (2) Procedures for Planning Vision Screening; and (3) Procedures for Screening Vision of Nonliterate, Nonverbal, Non-English-Speaking, and/or Very Young Children with Special Needs. Forms and applicable provisions from the *California Administrative Code* and the *Education Code* are included in the appendixes.

Objectives of Vision Screening Program

A vision screening program is legal when it is provided under the direction of qualified personnel. The major objectives of the vision screening program should be as follows:

1. To prevent the development of a vision difficulty that may affect the pupil's health and potential for learning
2. To identify pupils with certain vision liabilities through:

- a. Administration of selected vision screening tests
 - b. Planned procedures of observation
3. To notify parents of each pupil identified as having a possible vision liability and to encourage further examination through a professional vision evaluation
 4. To establish follow-up procedures which will ensure that each identified pupil will receive appropriate care
 5. To acquaint teachers with pupils who have vision liabilities, inform them about vision specialists' recommendations, and assist in planning for needed adjustments in the educational program
 6. To increase school nurse/teacher/administrator contributions to health services and education in the development of curriculum and in-service education related to visual deficiencies and school adjustment progress

Legal Basis for Vision Screening

In 1937 California public schools were permitted for the first time to provide for testing the vision of their pupils. And in 1947 it became mandatory for the governing board of each school district to provide for testing the sight of the pupils enrolled in district schools. (See Appendix C, *Education Code* Section 49452.) In 1971 legislation which specified required components of the vision appraisal program was passed. (See Appendix C, *Education Code* Section 49455.) The State Board of Education also established the qualifications that school personnel must meet to administer vision screening tests. Then, in 1973, the State Board adopted regulations which defined the terms in *Education Code* Section 49455 and established criteria for failing the test for visual acuity.

The Child Health Disability Prevention Program, enacted during the 1973 legislative session, required that on and after July 1, 1975, each child entering grade one present satisfactory evidence to the governing body that he or she had received specified health screening and evaluation services within the prior two years, unless the child's parents or guardians gave written notice to the governing body that they did not want their child to receive such services. Screening for

vision defects is a required component of the program. Through this program, children with eye and vision defects, as well as other potentially handicapping conditions, are identified, and appropriate treatment is recommended prior to their entering school. (*California Administrative Code, Title 17, Section 6846, and Health and Safety Code, Section 321.2.*)

Minimum Requirements for a School Screening Program

The following guidelines suggest a minimum school screening program to meet legal requirements. Unless a child has been excused from screening, a more complete evaluation of the child is encouraged to identify any additional problems. A minimum program includes the following elements:

1. Screening of all students in kindergarten or first grade and grades three, six, and nine or ten, as well as new enrollees and referrals at any grade level
2. Using the Snellen Test for all screening (Pupils who fail the first test must receive a second screening.)
3. Using the pseudoisochromatic plates for testing color vision
4. Recording results of vision screening on the permanent health record
5. Making continuous observations (by teachers) of pupils' appearance and behavior which may indicate vision difficulties
6. Conducting vision screening of pupils whose school performance indicates a vision problem
7. Retesting all pupils who fail the initial screening
8. Notifying parents of students who fail the second vision screening test
9. Assisting parents, when necessary, in a follow-up program

Personnel Authorized to Conduct Screening

Personnel in a school district or office of the county superintendent of schools who may be required or

permitted to give vision tests must be qualified to conduct such tests (*Education Code Section 49452 and the California Administrative Code, Title 5, Education, Section 591*). The following persons can conduct vision screening tests:

1. Medical practitioners, including a school nurse, physician, ophthalmologist, or optometrist who holds both (1) a certificate of registration from the appropriate California board or agency; and (2) a health and development credential or a standard designated service credential with a specialization in health.
2. Certificated school district or county employees who are qualified by training, including satisfactory completion of (1) six clock hours of vision screening; or (2) an accredited college or university course of at least one semester unit.
3. Contracting agents who have met the above requirements and who have been authorized by the office of the county superintendent of schools in which the district is located to perform tests.

Screening Procedure for Visual Acuity

While the legal requirements for vision screening include the Snellen Test, the color perception test, teacher observation, and follow-up procedures, it is advisable to use additional procedures to test for vision problems other than acuity. The latter can be performed only by trained and qualified personnel, including school nurses, licensed ophthalmologists, and optometrists. A standard testing procedure should be used to test all students. Proper equipment and a suitable physical environment are also required to administer the test. The following chart describes the equipment needs, room requirements, arrangement of equipment, testing procedures, and recording and referral processes for the Snellen Test, Color Perception Test, and additional procedures.



Screening Procedure for Visual Acuity

Equipment and Procedures	The Snellen Test	The Color Perception Test	Additional Procedures, Plus Sphere-Hyperopia, Muscle Balance, and Peripheral
Equipment	• A self-illuminating Snellen Chart. There are 10-foot or 20-foot (3-metre or 6-metre) charts available, depending on the size of the room. Exercise caution and avoid using a 20-foot (6-metre) chart at 10 feet (3 metres). The 20/20 letter on the 20-foot (6-metre) chart will measure 8.7 inches (22.2 centimetres) high.	• Obtain pseudoisochromatic or isochromatic plates from any optical supply company. • Use the correct illumination for valid color testing. If an incorrect light (e.g., an ordinary room light) is used, a color deficiency may not be detected. • Use the Macbeth Legal Lamp for the correct type of illumination. Other illumination sources are General Electric "Chrom 70" fluorescent lamp, Criticolor fluorescent lamp (F150TB/CC), or the Corning C filter available from Corning Glass Company over a 60- to 100-watt incandescent lamp.	The following procedures are for use only by school nurses and licensed ophthalmologists and optometrists who have had adequate training in specialized areas to identify visual liabilities other than visual acuity: • A white opaque occluding device for each student • Objects for fixation: 1. Occluder must be in relation to distance for testing and age of child 2. Penlight • Plus lens spheres glass, kindergarten, plus 2.25 diopters; grades one through five, plus 2 diopters; grades six through eight, plus 1.5 diopters; grades nine through twelve, plus 1 diopter
Room requirements	• Locate a room in a relatively quiet area and free of noise and movement that may distract the children being tested. • Use a room large enough to give 10 or 20 feet (3 or 6 metres) of testing space, depending on the size of the room. • Ensure normal classroom lighting for the screening room. Exceptions are required for some projection devices, and in these cases the manufacturer's instructions have precedence. • Protect pupils from a light source other than the light of the chart. Other light sources include window light, wall reflections, or light above or behind the chart.	• Check the manufacturer's recommendations for adequacy of lighting. • Avoid light from other sources near the place where the testing is being conducted. • Use low-room illumination so that the light reflecting from the colored surfaces of walls or draperies does not reach the test plates. For the same reason, examiners should avoid wearing brightly colored clothing when conducting the test.	

Screening Procedure for Visual Acuity (Continued)

Equipment and Procedures	The Snellen Test	The Color Perception Test	Additional Procedures, Plus Sphere-Hyperopia, Muscle Balance, and Peripheral
Arrangement of equipment (The arrangement of the equipment is important for accuracy in conducting the tests.) Testing procedures (To secure the confidence, understanding, and co-operation of pupils taking the test for the first time, the person administering the test should explain its purposes and procedures.)	- Place the Snellen Chart at one end of the room with 10 or 20 feet (3 or 6 metres) of unobstructed floor space immediately in front of it. - Mark a line of either 10 or 20 feet (3 or 6 metres) in front of the chart. - Place the chart so that the center is approximately at the pupil's eye level. Adjust the chart height, as necessary, to the pupil's eye level. - Use a standard testing procedure for all pupils. - Place the pupil 10 or 20 feet (3 or 6 metres) from the appropriate chart, depending on the chart used. The eyes of the standing pupils must be parallel and directly above the line; the eyes of pupils who are seated must be parallel and directly above the line. - Tell the pupils to keep both eyes open during the test. Teach the pupils to hold a small cover obliquely along their noses to occlude vision in one eye at a time. An assistant may have to hold the card for younger children. Take care that the occluder or card does not press on the eye. - Use a fresh cup or card with each pupil to prevent any infectious condition from being communicated from one pupil to another. - Test those pupils wearing glasses with their glasses on, then without. - Test the right eye first, then the left eye, and then both. A standardized routine avoids confusion and facilitates recording. Observe the student	- Follow the manufacturer's directions for the best results. - Administer the test to male pupils only. - Follow the manufacturer's directions regarding procedures for testing and scoring of results. - Show pupils how to use the soft dry paint brush or cotton-tipped swab to trace the symbols on the color plate.	Procedures for five tests: cover tests, near-point of accommodation test, near point of convergence test, penlight test for large strabismus, and hyperopia test are listed here. <i>Cover Tests:</i> - Unilateral cover test is used to detect strabismus. - Have the pupil fixate on a distant target. - Carefully watch the right eye in a good light. - Place the eye cover adjacent to the left eye. - Quickly cover the left eye while watching the right eye. If the right eye moves inward, outward, up or downward to fixate the target, strabismus is presumed. - Repeat the above procedure while observing the left eye and covering the right eye. - Alternative cover test is used to detect heterophoria.

Screening Procedure for Visual Acuity (Continued)

Equipment and Procedures	The Snellen Test	The Color Perception Test	Additional Procedures, Plus Sphere-Hyperopia, Muscle Balance, and Peripheral
Testing procedures (continued)	for squinting or turning the head during screening. • Begin screening with the 20/40-foot (6/12-metre) letters and proceed with testing through the 20-foot (6-metre) letters. It is not necessary to test beyond the 20-foot (6-metre) letters. • Use the symbol "E" chart for pupils through the second grade and for non-reading and non-English-speaking children. When using the "E" chart, follow these guidelines: 1. Indicate, by hand, which way the "E" points. Verbal responses may be agreed upon. 2. Avoid fatigue by having the pupil start reading the "50" line if no vision difficulty is suspected. 3. Check the pupil's performance on the "20" line if the pupil responded readily and correctly to line "50." 4. Move promptly from one symbol or one line to another. Encourage the child to do his or her best to read symbols. Suggest guessing when the child falters. If strain is apparent, do not pressure the child for responses. 5. Make appropriate adjustments if pupils are unable to read the 100/200 symbols by moving the pupil forward 5 or 10 feet (1.5 or 3 metres) as necessary. Use the new distance as the numerator in the notation; i.e., 15/100, or 10/100, or even 5/100 (distance/foot letter size). 6. Follow the same procedure as that used to test older children with the alphabet chart.		1. Have the pupil fixate a distant target. 2. Place the eye cover over the right eye. 3. Move the cover to the left eye while looking directly toward the right eye. If the right eye moves to fixate the target, heterophoria is presumed. • Conduct the cover test at the reading position. Repeat the above tests while having the pupil hold the target at his or her reading distance. A slight inward movement in the alternative cover test is not abnormal. <i>Near Point of Accommodation Test:</i> This test is used to determine the nearest focus. Normal school-aged children should be able to focus clearly to less than 6 inches (15 centimetres) from their eyes. 1. Use a small target, such as a typed letter on a white background. 2. Starting at about 14 inches (35.6 centimetres), in good light, place the target directly in front of the pupil. Ask if the target is seen clearly. If it is, move the target toward the pupil until it is seen to blur. <i>Near Point of Convergence Test:</i> This test is used to determine the nearest point of binocular convergence. A normal school-aged

Screening Procedure for Visual Acuity (Continued)

Equipment and Procedures	The Snellen Test	The Color Perception Test	Additional Procedures, Plus Sphere-Hyperopia, Muscle Balance, and Peripheral
Testing procedures (continued)			pupil should be able to fixate binocularly the target to within 4 inches (10.2 centimetres) of his or her eyes. 1. Use a small target, such as a typed letter on a white background. 2. Start at a distance of 10 inches (25.4 centimetres), in good light, and place the target directly in front of the pupil. 3. Direct attention to the target and move it toward the pupil until one eye moves outward (rarely inward) while the other eye continues to focus on the target. <i>Penlight Test for Large Strabismus:</i> This test is used to separate strabismus from facial asymmetry. 1. Hold a penlight close to the individual's sighting eye and direct the light toward the pupil's eyes. The pupil should be directly facing the examiner. 2. Observe the images. 3. If the images of the penlight in the pupil's eyes appear to be in the same place in each of the pupil's eyes, then large strabismus is presumed to be absent. 4. If the images in the pupil's eyes do not appear to be in the same place in each eye, strabismus is suspected and should be confirmed with the unilateral cover test described earlier.

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Screening Procedure for Visual Acuity (Continued)

Equipment and Procedures	The Snellen Test	The Color Perception Test	Additional Procedures, Plus Sphere-Hyperopia, Muscle Balance, and Peripheral
to be given further attention. Recording test results directly on the cumulative health record results in savings of time and elimination of errors that could occur in transferring results from one record sheet to another. Referral procedures	"R" indicates the right eye and "L" the left; for example, R 20/20 and L 20/40. • Compile a list containing only names of children who need to be given further attention. • Rescreen pupils suspected of having a vision difficulty prior to sending a referral to parents. • Have qualified supervisors of health, as specified in <i>Education Code</i> sections 44873 and 44877-44878, rescreen those pupils suspected of having a vision problem found in the initial screening. Pupils whose performance demonstrates obvious vision liabilities may be rescreened promptly and referred. • Record the results on the pupil's permanent record. • Make referrals to the parents for pupils who fail the retest. Failure may be any of the following: 1. For children under six years of age with a visual acuity of 20/50 or worse. The designation of 20/50 or worse indicates the inability to identify accurately the majority of letters or symbols on the 40-foot (12-metre) line of the test chart at a distance of 20 feet (6 metres). 2. For children six years of age or over with a visual acuity of 20/40 or worse. This means the inability to identify the majority of letters or symbols on the 30-foot (9-metre) line of the chart.	• Failure in this test is not cause for referral. • Inform the parents of the pupil's vision liability, if present. Color deficiency is nonprogressive, cannot be corrected, and does not affect visual acuity. • Inform the teachers and counselors of the pupil's vision liability so that they may: 1. Adjust educational materials to situations where color discrimination is a criterion for progress. 2. Help the pupils develop special techniques for compensating for their limitations (e.g., use a light blue rather than a black felt board). 3. Take into account color vision difficulties for driver training and vocational guidance.	• Repeat the appropriate procedures to confirm visual liability before informing parents or guardians.

Screening Procedure for Visual Acuity (Continued)

Equipment and Procedures	The Snellen Test	The Color Perception Test	Additional Procedures, Plus Sphere-Hyperopia, Muscle Balance, and Peripheral
	3. When there is a difference of visual acuity between the two eyes for two lines on the Snellen Chart. For example, visual acuity of 20/20 in one eye and 20/40 in the other or 20/30 in one eye and 20/50 in the other eye. 4. For pupils who show significant signs or symptoms (behavior, complaints, appearance, performance, or physical activity) which suggest visual difficulty.		

Procedures for Planning Vision Screening

The results of teacher observations of pupil behavior and appraisal of pupil achievement are exceedingly important because unusual behavior, poor school performance, and reduced rates of learning may indicate health problems.

Since the teacher observes children involved in classroom activities, he or she plays a key role in detecting suspected visual problems. A plan for close observation of pupils by the teacher and immediate referral of suspected visual problems to the school nurse may benefit the pupil's school performance.



Detection of Visual Problems

Signs and symptoms of visual problems which the teacher may observe in students are as follows:

1. Behavior
 - a. Holds work too close or too far
 - b. Asks for special seating
 - c. Thrusts head forward to see distant objects
 - d. Holds body tense when reading or looking at distant objects
 - e. Frowns when reading
 - f. Attempts to brush away a blur
 - g. Rubs eyes frequently
 - h. Blinks continually when reading
 - i. Tilts head
 - j. Covers one eye
2. Complaints
 - a. Eyes are sensitive to light.
 - b. Eyes or lids burn or itch.
 - c. Images appear as blurred or doubled.
 - d. Letters and lines run together.
 - e. Words seem to jump.
 - f. Frequent headaches occur.
3. Appearance
 - a. Lids are crusted, red-rimmed, or swollen; sties occur frequently.
 - b. Eyes water or appear bloodshot.
 - c. Eyes are crossed or turned.
4. Performance
 - a. Exhibits slowness in learning to read
 - b. Exhibits poor achievement demonstrated by reduced quality or quantity of work and slow rate of learning

5. Physical activity

- a. Performs poorly at games
- b. Exhibits poor eye-muscle coordination
- c. Stumbles or trips over small objects



Follow-Up Program

The focus of a follow-up program includes the coordination of activities, interpretation of findings, and transmittal of information among school personnel, parents, and eye and vision specialists. These important tasks are carried out mainly by the school nurse, along with the help of other school personnel. The success of the program, however, is dependent on the effort given to the implementation of systematic follow-up procedures, such as those that follow:

1. Follow-up by the school nurse or designated school personnel
 - a. Notify the parents of pupils with suspected visual problems.
 - b. Notify the parents in writing (refer to Appendix A for form), by telephone, or parent-nurse conference. A conference should be supplemented by a written notice to the parents regarding their child's apparent eye or vision difficulty.
 - c. Advise the parents to take the referral form for an appointment to the vision or eye practitioner.
 - d. Advise the parents of the need to have the referral form returned to school after obtaining a professional examination. The information on the form is needed by the school as a basis for making any adjustments needed for the student's educational program.
 - e. Avoid making any recommendation to a specific individual or class of practitioner (ophthalmologist or optometrist) for examining, treating, or correcting any defect the pupil may have (*Education Code* Section 49456).
 - f. Maintain contact with the parents until the pupil has received the needed examination and necessary care.
 - g. Assist the parents in need of financial assistance by referring them to one of the following:

- (1) County Welfare Department for Aid to Families with Dependent Children
 - (2) Lions Club for refractions and glasses
 - (3) PTA and other service organizations
 - (4) California Children's Services
- h. Develop and supervise a system for recording results and pertinent information on a health record.
 - i. Consult with teachers and counselors and recommend educational adjustments, if necessary, to meet individual needs.
 - j. Follow through with procedures for noncorrectable vision loss (severe vision handicaps).
 - k. Inform parents, if it is the policy of the district, that a pupil has passed a screening test but that screening for visual acuity does not replace a professional eye examination or does not identify all visual problems.
2. Glasses or known vision defect. If the pupil wears glasses or has a known vision defect, the school nurse should first check to determine whether the school has a record of the pupil's eye examination. It is imperative to obtain the results of a professional examination and any recommendations that might affect school performance. If a pupil has a visual defect, the school nurse should:
 - a. Assist the pupil in adjusting to the need for corrective lens if they have been prescribed or for some other therapeutic intervention such as a patch.
 - b. Engage in direct pupil counseling regarding eye health and safety.
 - c. Emphasize the importance of continued follow-up by the pupil's eye and vision specialist.
 - d. Help the students understand the reasons for regular examinations by eye or vision specialists.
 - e. Inform the pupil of the importance of keeping his or her glasses clean and properly adjusted.
 3. Procedures for noncorrectable vision loss (severe vision handicaps). Eye and vision specialists will find some pupils who have visual defects that cannot be fully corrected through treatment. In these cases, the school nurse:
 - a. Counsels parents regarding severe vision loss
 - b. Refers parents to a special education program in the school district or to the office of the county superintendent of schools for necessary information regarding social services and school placement
 - c. Refers parent to California Children's Services for eligible services of pupil's visual handicap, such as strabismus, cataracts, and so on
 - d. Examines the professional's or specialist's reports for information about the visual status of the pupil that can be used as a basis for making any needed adjustments in the classroom arrangement or educational program
 - e. Maintains identification procedures for pupils with severe visual impairment as well as referral and follow-up services

Checklists for Implementation of Vision Screening Programs

For the Administrator

This checklist gives some of the essential requirements for a vision screening program in the school and can be used in planning a program.

Yes No

- ☐ ☐ Is the school doing the vision screening on each student every three years, as mandated in *Education Code* Section 49455?
- ☐ ☐ Does the vision screener meet the state requirements for personnel doing vision screening?
- ☐ ☐ Is a lesson on vision conducted in the school, and is it correlated with the vision screening of students?
- ☐ ☐ Has the qualified vision screener been provided with the necessary forms, equipment, and appropriate space?
- ☐ ☐ Is there a follow-up plan by the school nurse on all vision problems found?
- ☐ ☐ Has the school identified community resources available?
- ☐ ☐ Does the school have a plan to coordinate with the community agencies offering gratuitous help?
- ☐ ☐ Have parents been informed, in writing, about the vision screening program in the annual notification of parents' rights?

For the Vision Screener

The vision screener may be the school nurse or contracting agent.

Yes No

- ☐ ☐ Is the school performing the vision screening on each student every three years, as mandated in the *Education Code*?
- ☐ ☐ Are vision screeners trained and qualified in accordance with *California Administrative Code, Title 5, Education*, sections 590—596?
- ☐ ☐ Are contract agents registered, by letter, with the office of the county superintendent of schools and the State Department of Education?
- ☐ ☐ Have arrangements been made for appropriate facilities to conduct screening?
- ☐ ☐ Is there confirmation of community resources to assist in the implementation of the program? Appropriate community personnel can include licensed ophthalmologists, optometrists, and/or personnel from the Child Health and Disability Prevention Program, California Children's Services, Parent Teachers Association, local public health departments, service clubs, and other voluntary organizations (e.g., Lions Club and National Society for the Prevention of Blindness).

For the Vision Screener to set up and organize the screening

Is there a supply of forms necessary for the program?

Yes No

- ☐ ☐ Vision screening recheck form
- ☐ ☐ Report of eye examination to parents

Checklists for Implementation of Vision Screening Programs

Has the school calendar been cleared and program dates established?

Yes No

- ☐ ☐ For pupil orientation
- ☐ ☐ For staff education
- ☐ ☐ For screening date
- ☐ ☐ For screening date for absentees
- ☐ ☐ Have necessary ancillary services (persons for screening assistance, custodial services, and so on) been secured?
- ☐ ☐ Has a suitable physical environment been selected?
- ☐ ☐ Has the equipment been inspected for proper functioning (extra bulbs and extension cords)?

Two to three weeks before the screening date

Yes No

- ☐ ☐ Has there been confirmation from appropriate personnel as to dates and locations for screening and rescreening?
- ☐ ☐ Are the screening/recording work sheets and/or health records available?
- ☐ ☐ Has there been an education program scheduled for students as close to the screening date as possible?
- ☐ ☐ Is there a plan for follow-up procedure(s)?

One week before the screening date

Yes No

- ☐ ☐ Has the screening list been updated?
- ☐ ☐ Have staff and volunteers been reminded of screening dates and locations?
- ☐ ☐ Was an information item included in the school bulletin or paper?
- ☐ ☐ Has the screening equipment been checked and is it ready for use?

Are all supplies ready for the implementation of the program?

Yes No

- ☐ ☐ Testing materials
- ☐ ☐ Screening/recording work sheets
- ☐ ☐ Health records

Procedures for Screening Vision of Nonliterate, Nonverbal, Non-English-Speaking, and/or Very Young Children with Special Needs

All children should have comprehensive health examinations before they enter school. Through these examinations children with health problems are identified, and essential remedial steps can be taken. Examination of the eyes is an important part of such appraisals. If eye examinations are made before children reach the age of four, serious eye defects, such as amblyopia, can then be treated before the children enter school and early enough to obtain the best results from treatment. School personnel should encourage and assist in the development of such programs because eye examinations given prior to school entry provide the basis for subsequent school vision screening.

Preschool Screening

Special considerations to be aware of when screening preschool, kindergarten, and special education children include the following:

- Short attention span
- Limitations with verbal expression and/or language
- Partially developed eye-hand coordination
- Fear of new experiences
- Handicapping conditions which hinder responses

Young children and children with special needs require special attention. It is important to have the cooperation of parents, teachers, teacher aides, and other school personnel in ancillary services for a successful program. Sensitivity to children's actions and awareness of their reactions to new experiences is dependent on the following:

- Understanding the child's fear of health professionals
- Establishing rapport with the child
- Using personnel familiar to the child
- Avoiding the use of terms such as *nurse* and *examination*
- Conducting screening in familiar surroundings
- Presenting screening as a game rather than as a test
- Using single exposure screening card
- Orienting children to screening by storytelling or in other innovative ways

Planning, organizing, and implementing a vision screening program for children needing special care

parallels the regular screening program and processes described on the previous pages.

Administration of the Test

When screening young children or those having special needs, there are methods and appropriate equipment suitable to a child's developmental level. Using these methods will ease the child's performance of the test and provide more accurate results. With children who have never taken a vision test, the procedure can be demonstrated and carried out in the spirit of a game. The pretesting activities may be carried out in regular classrooms. The following aids (Appendix B) may be helpful for screening and may direct children to successes in screening:

1. Blackbird Vision Screening System

- a. Tell a story of a blackbird to the children. This can be done by the teacher, parent, or school nurse.
- b. Have the parents retell the story to the children who need extra help in understanding the flight positions of the blackbird.

2. Michigan Vision Screener

- a. On a large piece of paper, draw a cloud at the top, grass at the bottom, a rabbit on the right, and a flower on the left. Pin a black Snellen "E" letter in the center, which can be made from construction paper.
- b. Turn the "E" in different positions and ask the children to identify the object the letter is pointing to.

3. Modified Sjogren Hand

- a. As a classroom project, have the children trace their own hands on construction paper.
- b. Teach the various positions of the hand and the direction in which the fingers are pointing while the teacher turns the paper and points the fingers in various directions.

4. Snellen Illiterate "E" Chart

- a. Cut out a large "E" from black construction paper.
- b. Teach the children the up, down, right, and left positions of the "E." Ask in which direction the three legs of the table are pointing.



Environment and Equipment

It is advisable to use furniture appropriate to the children's size and to use equipment suggested by the manufacturer for a particular screening method. For more detail on room environment and arrangement of equipment, refer to the chart "Screening Procedure for Visual Acuity" on pages 3 through 9.



Program Implementation

Other procedures, such as planning, referral, recording, and follow-up, are conducted in the same manner as the regular vision screening procedures outlined in the previous section. Refer to the checklists and procedural details on pages 11 through 14.



Glossary

Accommodation—The power of the eye to alter the shape of its lens so that it can adjust the focus of the eye for distance and closeness.

Amblyopia—Dimness of vision without any apparent disease of the eye. *Amblyopia ex anopsia*—Dimness of vision because of disuse of an eye with no apparent physical abnormality.

Astigmatism—A condition in which the optical surfaces of the eye are distorted so that light rays are not sharply focused on the retina for either near or distant vision.

Binocular vision—The use of both eyes simultaneously in such a manner that each retinal image contributes to the final percept of a single image.

Central visual acuity—Ability of the eye and brain to perceive the shape and form of objects in the direct line of vision.

Color deficiency—The inability to discriminate between certain colors, usually red-green, seldom blue-yellow. Pseudoisochromatic plates are used for testing for color deficiency.

Color vision—The inability to discriminate colors.

Cover test—A test for ocular alignment which discloses whether or not the two eyes function together as they should. The unilateral cover test is used to discover strabismus. The alternate cover test is used to discover heterophoria or to quantify strabismus.

Field of vision—The entire area which can be seen at one time without shifting the head or eyes.

Focus point—The point to which rays are converged after passing through a lens.

Foot-candle—A unit of measure of light intensity.

Fusion—The power of coordinating the images received by the two eyes into a single mental image.

Hyperopia—Farsightedness is a refractive error in which the image does not come to focus before striking the retina in the relaxed eye. Accommodation may be used to overcome small amounts of hyperopia.

Monocular—Involving the use of a single eye.

Myopia—Nearsightedness is a refractive error in which the point of focus for light rays is in front of the retina, resulting in blurred distant vision.

Occlusion—Obscuring the vision of one eye to test the vision or force the use of the other eye.

Ophthalmologist or Oculist—A physician who has specialized in the diagnosis and treatment of vision defects and diseases of the eye. Prescriptions may be given for glasses and contact lens, and other corrective measures and surgery may be performed. The initials M.D. are used after the person's name.

Optician—A dealer who fills optical prescriptions for glasses by grinding lens, fitting them into frames, and adjusting frames to the wearer.

Optometrist—A person who has done advanced study on the eye, vision problems, and visual performance. The person is licensed by law to examine eyes and vision and to prescribe and provide glasses, contact lens, and orthoptic training. The initials O.D. are used after the person's name.

Squint—Strabismus.

Strabismus—Failure of the two eyes to direct their gaze at the same object because of inappropriate neuromuscular control or because of fibrosis or paralysis of one or more extraocular muscles, as in crossed-eyes or wall-eyes.

Visual acuity—Sharpness of central vision for detail, as in reading. Vision acuity measurements indicate the smallest recognizable figure or symbol in central vision.

Selected References

- Brajkovich, Helen. "Dr. Snellen's 20/20: The Development and Use of the Eye Chart," *Journal of School Health* (October, 1978).
- Cornacchia, Harold J., and Wesley M. Stanton. "Vision," in *Health in Elementary Schools*. St. Louis: C. V. Mosby Company, 1979, pp. 59—62.
- A Guide for Eye Inspection and Testing Visual Acuity of School Age Children: A Screening Process*. New York: National Society for the Prevention of Blindness, 1979.
- Helveston, Eugene, and Forrest Ellis. *Pediatric Ophthalmology Practice*. St. Louis: C. V. Mosby Company, 1980.
- Jobe, Fred W. *Screening Vision in Schools*. Newark, Del.: International Reading Association, 1976.
- Lombard, Thomas J. "A Lesson for Every State from Minnesota's Preschool Screening Program," *Journal of School Health* (October, 1980).
- Rhodes, Hafen, Karren, and Rollins. "Visual Problems" (Chapter 13), in *Elementary School Health*. Boston: Allyn and Bacon, Inc., 1981, pp. 220—26.
- Teaching About Vision* (2nd revised edition). New York: National Society for the Prevention of Blindness, 1972.
- Van Noorden, Gunter. "Chronic Vision Problems of School-Age Children," *Journal of School Health* (June, 1976).

Appendix A

Vision Screening Rechecks

This form may be used for recording vision screening results for those children who need follow-up.¹

School _____ Grade _____

Teacher _____ Date _____

Name of pupil	Initial Snellen Test						Color test		Recheck screening						Additional procedures ²	Referrals
	Without glasses			With glasses			Normal	Defective	Without glasses			With glasses				
	R	L	Both	R	L	Both			R	L	Both	R	L	Both		
1																
2																
3																
4																
5																
6																
7																
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17																
18																
19																
20																

1. Since the majority of schoolchildren have normal vision, it is recommended that test results be recorded directly on the cumulative health record and that this form include only those children who need follow-up.

2. Plus sphere-hyperopia, muscle balance, and peripheral.

Appendix A

Report of Eye Examination

This form is approved by the Superintendent of Public Instruction, as required by *Education Code* Section 49456, for reporting results of vision screening testing to parents and guardians and for obtaining recommendations from the professional examiner.

Dear Parent/Guardian:

Your child _____ recently received a vision screening examination at school.
The following results were obtained:

Snellen test: Right Eye 20/ _____ Left Eye 20/ _____

Additional procedures _____

Comments _____

It is recommended that your child's eyes be examined by an eye or vision practitioner.

It is requested that you take this form with you, have it completed by the examiner, and then return it to your school's health office.

Name of school _____

Address _____

Phone _____

(Signature of school nurse)

I give permission to share this information with the school.

(Signature of parent)

Report of Eye Examination to the School

Name of student	School	Grade	Date examined	Date of reexamination
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Visual acuity		Lens requirements		
Without lens	With lens	Results	Frequency	
R 20/	R 20/	☐ Correction not required	☐ Wear at all times	
L 20/	L 20/	☐ Correction prescribed	☐ Wear for close work	
		☐ Glasses ☐ Contact lens	☐ Wear for distance only	

Diagnosis

Recommendation (special seating, large print, special education placement, etc.)

Examiner's signature

Address

Phone number

Appendix B

Aids for Vision Screening

Check also with local suppliers for screening aids.



Blackbird Vision Screening Kit and Chart

Blackbird Vision Screening System
P.O. Box 7424
Sacramento, CA 95826



Michigan Junior Vision Screener

School Health Supply Company
300 Lombard Road
Addison, IL 60101



Snellen E Chart/Cards

Sjogren Hand Test Cards
Good-Lite Company
7426 W. Madison Street
Forest Park, IL 60130



Titmus Vision Tester Materials

Titmus Optical, Inc.
Petersburg, VA 23803

Legal and Administrative Provisions

I. Sections from the *California Administrative Code, Title 5, Education*

Article 4. Vision Screening (*Educational Code Section 49452*)

590. Duly Authorized Agency Defined. "A duly authorized agency", as used in Education Code Section 49452, means a city or county health department, a local health district, or the State Department of Public Health.

NOTE: Authority cited for Article 4: Section 33031 and 49452, Education Code. Issuing agency: Superintendent of Public Instruction.

History: 1. Amendment of section and NOTE filed 9-23-77; effective thirtieth day thereafter (Register 77, No. 39).

591. Employees Authorized to Give Tests. An employee of the governing board or of the county superintendent who may be required or permitted to give vision tests pursuant to Education Code Section 49452 to pupils enrolled in the district is one of the following:

(a) A physician, ophthalmologist, optometrist, or nurse who holds both:

(1) A certificate of registration from the appropriate California board or agency.

(2) A health and development credential or a standard designated service credential with a specialization in health.

Such an employee is a "qualified supervisor of health" as used in this article and in Education Code Section 49452.

(b) Any other employee of the school district or of the county superintendent of schools who holds a teaching credential issued by the State Board and who has filed with the employing school district or county superintendent of schools, as the case may be, one of the following documents:

(1) A statement from a qualified supervisor of health that the employee has satisfactorily completed an acceptable course of in-service training in techniques and procedures in vision screening of at least six clock hours given by the qualified supervisor of health making the statement and that the employee is qualified to administer vision tests to pupils.

(2) A transcript from an accredited college or university evidencing that the employee has successfully completed an acceptable course in vision screening of at least one semester unit.

History: 1. Amendment filed 9-23-77; effective thirtieth day thereafter (Register 77, No. 39).

592. Acceptable Course in Vision Screening. An acceptable course in vision screening is one that provides the following:

(a) Basic knowledge of the structure, normal development, and function of the eye and common anomalies of vision and factors influencing visual performance.

(b) Basic knowledge of signs and symptoms suggesting eye difficulty.

(c) Techniques and procedures in administering Snellen and color vision tests. Such techniques and procedures shall include training in the following:

(1) Establishing tests rapport with pupils.

(2) Seating of pupil and placing of equipment.

(3) Providing adequate lighting conditions for the testing situation.

(4) Recording test results.

(5) Referring pupils in need of follow-up.

(d) Practice in administering Snellen and color vision tests under the supervision of a qualified supervisor of health.

593. Responsibility as to Eligibility. Each school district and county superintendent of schools shall determine and be responsible for the eligibility of personnel employed or permitted by the district or county superintendent of schools to administer eye screening tests or to conduct inservice training programs in techniques and procedures in administering such tests.

594. Examination of Visual Acuity. The following definitions shall apply to terms used in Education Code Section 49452.

The examination of visual acuity shall mean a test for visual acuity at the far point. This shall be conducted by means of the Snellen Test. Conduct of the test and the testing environment shall conform to procedures and settings described in the most recent edition of *"A Guide for Vision Testing in California Public Schools."* Test failure for the initial vision test shall be defined as follows:

(a) For children under six years of age: Vision acuity of 20/50 or worse. The designation 20/50 or worse indicates the inability to identify accurately the majority of letters or symbols on the 40-foot line of the test chart at a distance of 20 feet.

(b) For children six years of age or older: Visual acuity of 20/40 or worse. This means the inability to identify the majority of letters or symbols on 30-foot line of the chart.

(c) For all children: A difference of visual acuity between the two eyes of two lines on the Snellen Chart. This means, for example, visual acuity of 20/20 in one eye and 20/40 in the other or 20/30 in one eye and 20/50 in the other.

Following failure of the initial vision acuity screening test, a reevaluation shall be accomplished prior to referral for definitive professional evaluation. This reevaluation shall be done by persons authorized to give tests as per Section 591(a) of this Article.

- History:* 1. New section filed 1-19-73; effective thirtieth day thereafter (Register 73, No. 3).
2. Amendment filed 5-21-75; effective thirtieth day thereafter (Register 75, No. 21).
3. Amendment of Section and repealer of NOTE filed 9-23-77; effective thirtieth day thereafter (Register 77, No. 39).

595. Examination of Color Vision. The examination of color vision as used in Education Code Section 49452 shall mean a test employing pseudoisochromatic plates. Procedures and criteria of failure as described by the manufacturer shall be used.

- History:* 1. New section filed 1-19-73; effective thirtieth day thereafter (Register 73, No. 3).
2. Amendment filed 9-23-77; effective thirtieth day thereafter (Register 77, No. 39).

596. Gross External Observation of the Children's Eyes, Visual Performance and Perception. Gross external observation of the children's eyes, visual performance and perception, as used in Education Code Section 49452 shall mean continuous observation by teachers of the appearance, behavior and complaints of pupils that might indicate vision problems. Also, periodic investigation where pupils' school performance begins to give evidence that existence of the problem might be caused by a visual difficulty. Such an evaluation shall be done in consultation with the school nurse.

- History:* 1. New section filed 1-19-73; effective thirtieth day thereafter (Register 73, No. 3).
2. Amendment filed 9-23-77; effective thirtieth day thereafter (Register 77, No. 39).

II. Sections from the *Education Code*

Article 6. Supervision of Health (Article 6 enacted by Stats. 1976, Ch. 1010)

Employment of Supervisors of Health

1750. The county superintendent of schools may, with the approval of the county board of education, employ one or more supervisors of health, as supervisors of health are defined in Section 49420, to provide health services to pupils in elementary school districts under his jurisdiction which had less than 901 units of average daily attendance during the preceding fiscal year, to pupils in high school districts under his jurisdiction which had less than 301 units of average daily attendance during the preceding fiscal year, and to pupils in unified school districts under his jurisdiction which had less than 1,501 units of average daily attendance during the preceding fiscal year.

(Enacted by Stats. 1976, Ch. 1010.)

Authority to Contract for Provision of Health Services

1751. In lieu of employing supervisors of health, the county superintendent of schools may, with the approval of the county board of education, contract with the board of supervisors of the county in which he holds office, or with any local health district located wholly or partially within such county, for the provision of health services by employees of the county health department or local health district to pupils in the school districts specified in Section 1750.

(Enacted by Stats. 1976, Ch. 1010.)

Provision of Health Service under District Agreement

1752. The county superintendent of schools may, with the approval of the county board of education, enter into an agreement with the governing board of any school district under his jurisdiction for the provision of any or all health services to the district by the county superintendent of schools. The agreement shall provide for the payment of the cost of providing the services. The county superintendent of schools shall transfer from the funds of the district to the county school service fund the amounts set forth in the agreement.

(Enacted by Stats. 1976, Ch. 1010.)

Credential Requirements

1753. The services described in Section 1750, 1751, and 1752 shall be performed by persons who hold a valid health and development credential, or life diploma based thereon, or a services credential with a specialization in health issued by the State Board of Education or Commission for Teacher Preparation and Licensing; provided, however, that a psychologist may be employed to perform psychological services or may perform psychological services under contract if he is the holder of a valid school psychologist credential issued by the State Board of Education.

(Enacted by Stats. 1976, Ch. 1010.)

Duties of Supervisors of Health

1754. A supervisor of health employed by the county superintendent of schools shall perform such duties in connection with the supervision of health of pupils as are prescribed by the county superintendent of schools. All rules governing health services provided pursuant to Sections 1750, 1751, or 1752 shall be made by the county superintendent of schools.

(Enacted by Stats. 1976, Ch. 1010.)

Article 2. Employment (Article 2 enacted by Stats. 1976, Ch. 1010)

Qualifications of Supervisors of Health

44871. The qualifications of supervisors of health shall be as provided in Sections 44873 to 44878, inclusive.

(Enacted by Stats. 1976, Ch. 1010.)

Standard Designated Services Credential With a Specialization in Health; Services Credential With a Specialization in Health

44872. For the purposes of Sections 44873 to 44878, inclusive, "standard designated services credential with a specialization in health" and "services credential with a specialization in health" includes a community college health services credential when the service is provided in grades 13 and 14.

(Enacted by Stats. 1976, Ch. 1010.)

Qualifications for Nurse

44877. The qualifications for a nurse shall be a valid certificate of registration issued by the Board of Nurse Examiners of the State of California or the California Board of Nursing Education and Nurse Registration and either a health and development credential, a standard designated services credential with a specialization in health, or a services credential with a specialization in health.

The services credential with a specialization in health authorizing service as a school nurse shall not authorize teaching services unless the individual holds a baccalaureate degree, or its equivalent, and has completed a fifth year of preparation.

On and after January 1, 1981, the qualifications for a nurse shall also include proof satisfactory to the school district that the nurse has acquired training in child abuse and neglect detection. This requirement may be satisfied through participation by the nurse in continuing education activities relating to child abuse and neglect detection and treatment.

(Amended by Stats. 1978, Ch. 1225.)

Qualifications for Optometrist

44878. The qualifications for an optometrist are a valid certificate issued by the State Board of Optometry and a services credential with a specialization in health or a credential issued prior to November 23, 1970. Any school district may employ and compensate optometrists meeting the foregoing qualifications.

(Enacted by Stats. 1976, Ch. 1010.)

Article 2. Employment of Medical Personnel

(Article 2 enacted by Stats. 1976, Ch. 1010)

Supervision of Health and Physical Development of Pupils

49422. No physician, psychiatrist, oculist, dentist, dental hygienist, optometrist, otologist, podiatrist, audiologist, or nurse not employed in such capacity by the State Department of Public Health, shall be, nor shall any other person be, employed or permitted to supervise the health and physical development of pupils unless he holds a services credential with a specialization in health or a valid credential issued prior to the operative date of the amendment to this section enacted at the 1970 Regular Session of the Legislature.

Any psychologist employed pursuant to Section 49403, and this article shall hold a school psychologist credential, a general pupil personnel services credential authorizing service as a school psychologist, a standard designated services credential with a specialization in pupil personnel services authorizing service as a psychologist, or services credential issued by the State Board of Education or Commission for Teacher Preparation and Licensing.

The services credential with a specialization in health authorizing service as a school nurse shall not authorize teaching services unless the individual holds a baccalaureate degree, or its equivalent, and has completed a fifth year of preparation.

No physician employed by a district to perform medical services pursuant to Section 44873, shall be required to hold a credential issued by the State Board of Education or commission, provided he meets the requirements of Section 44873.

(Enacted by Stats. 1976, Ch. 1010.)

School Nurse: Permissible Services; Legislative Intent

49426. A school nurse is a registered nurse currently licensed under Chapter 6 (commencing with Section 2700) of Division 2 of the Business and Professions

Code, and who has completed the additional educational requirements for, and possesses a current credential in, school nursing pursuant to Section 44877.

School nurses strengthen and facilitate the educational process by improving and protecting the health status of children and by identification and assistance in the removal or modification of health-related barriers to learning in individual children. The major focus of school health services is the prevention of illness and disability, and the early detection and correction of health problems. The school nurse is especially prepared and uniquely qualified in preventive health, health assessment, and referral procedures.

Nothing in this section shall be construed to limit the scope of professional practice or otherwise to change the legal scope of practice for any registered nurse or other licensed healing arts practitioner. Rather, it is the intent of the Legislature to provide positively for the health services, many of which may be performed in the public schools only by physicians and school nurses. School nurses may perform, if authorized by the local governing board, the following services:

(a) Conduct immunization programs pursuant to Section 49403 and assure that every pupil's immunization status is in compliance with the law, including parental or guardian consent, and good health practice.

(b) Assess and evaluate the health and developmental status of pupils to identify specific physical disorders and other factors relating to the learning process, communicate with the primary care provider, and contribute significant information in order to modify the pupils' educational plans.

(c) Interpret the health and developmental assessment to parents, teachers, administrators, and other professionals directly concerned with the pupil.

(d) Design and implement a health maintenance plan to meet the individual health needs of the students, incorporating plans directed by a physician.

(e) Refer the pupil and his or her parent or guardian to appropriate community resources for necessary services.

(f) Maintain communication with parents and all involved community practitioners and agencies to promote needed treatment and secure reports of findings pertinent to educational planning.

(g) Interpret medical and nursing findings appropriate to the student's individual educational plan and make recommendations to professional personnel directly involved.

(h) Consult with, conduct in-service training to, and serve as a resource person to teachers and administrators, and act as a participant in implementing any section or sections of a comprehensive health instruction curriculum for students by providing current scientific information regarding nutrition, preventive dentistry, mental health, genetics, prevention of communicable diseases, self-health care, consumer education, and other areas of health.

(i) Counsel pupils and parents by:

(1) Assisting children and youth, parents, and school personnel in identifying and utilizing appropriate and mutually acceptable private and community health delivery services for professional care and remediation of defects.

(2) Counseling with parents, pupils and school staff regarding health-related attendance problems.

(3) Helping parents, school personnel and pupils understand and adjust to physical, mental and social limitations.

(4) Exploring with families and pupils, attitudes, information and values which affect their health behavior.

(j) Assist parents and pupils to solve financial, transportation and other barriers to needed health services.

(Added by Stats. 1978, Ch. 1062.)

Article 4. Physical Examinations

(Article 4 enacted by Stats. 1976, Ch. 1010)

Rules to Insure Proper Care and Secrecy

49450. The governing board of any school district shall make such rules for the examination of the pupils in the public schools under its jurisdiction as will insure

proper care of the pupils and proper secrecy in connection with any defect noted by the supervisor of health or his assistant and may tend to the correction of the physical defect.

(Enacted by Stats. 1976, Ch. 1010.)

Parent's Refusal to Consent

49451. A parent or guardian having control or charge of any child enrolled in the public schools may file annually with the principal of the school in which he is enrolled a statement in writing, signed by the parent or guardian, stating that he will not consent to a physical examination of his child. Thereupon the child shall be exempt from any physical examination, but whenever there is a good reason to believe that the child is suffering from a recognized contagious or infectious disease, he shall be sent home and shall not be permitted to return until the school authorities are satisfied that any contagious or infectious disease does not exist.

(Enacted by Stats. 1976, Ch. 1010.)

Sight and Hearing Test

49452. The governing board of any school district shall, subject to Section 49451, provide for the testing of the sight and hearing of each pupil enrolled in the schools of the district. The test shall be adequate in nature and shall be given only by duly qualified supervisors of health employed by the district; or by certificated employees of the district or of the county superintendent of schools who possess the qualifications prescribed by the Commission for Teacher Preparation and Licensing; or by contract with an agency duly authorized to perform such services by the county superintendent of schools of the county in which the district is located, under guidelines established by the State Board of Education; or accredited schools or colleges of optometry, osteopathy, or medicine. The records of the tests shall serve as evidence of the need of the pupils for the educational facilities provided physically handicapped individuals. The equipment necessary to conduct the tests may be purchased or rented by governing boards of school districts. The state, any agency, or political subdivision thereof may sell or rent any such equipment owned by it to the governing board of any school district upon such terms as may be mutually agreeable.

(Enacted by Stats. 1976, Ch. 1010.)

Vision Appraisal

49455. Upon first enrollment in a California school district of a child at a California elementary school, and at least every third year thereafter until the child has completed the eighth grade, the child's vision shall be appraised by the school nurse or other authorized person under Section 49452. This evaluation shall include tests for visual acuity and color vision; however, color vision shall be appraised once and only on male children, and the results of the appraisal shall be entered in the health record of the pupil. Color vision appraisal need not begin until the male pupil has reached the first grade. Gross external observation of the child's eyes, visual performance, and perception shall be done by the school nurse and the classroom teacher. The evaluation may be waived, if the child's parents so desire, by their presenting of a certificate from a physician and surgeon or an optometrist setting out the results of a determination of the child's vision, including visual acuity and color vision.

The provisions of this section shall not apply to any child whose parents or guardian file with the principal of the school in which the child is enrolling, a statement in writing that they adhere to the faith or teachings of any well-recognized religious sect, denomination, or organization and in accordance with its creed, tenets, or principles depend for healing upon prayer in the practice of their religion.

(Amended by Stats. 1978, Ch. 843.)

Report to Parent

49456. (a) When a defect other than a visual defect has been noted by the supervisor of health or his assistant, a report shall be made to the parent or guardian of the child, asking the parent or guardian to take such action as will cure or correct the defect. Such report, if made in writing, shall not include any

recommendation suggesting or directing the pupil to a designated individual for the purpose of curing or correcting any defect referred to in the report.

(b) When a visual defect has been noted by the supervisor of health or his assistant, a report shall be made to the parent or guardian of the child, asking the parent or guardian to take such action as will correct the defect. Such report, if made in writing, must be made on a form prescribed or approved by the Superintendent of Public Instruction and shall not include therein any recommendation suggesting or directing the pupil to a designated individual or class of practitioner for the purpose of correcting any defect referred to in the report.

(c) The provisions of this section do not prevent a supervisor of health from recommending in a written report that the child be taken to a public clinic or diagnostic and treatment center operated by a public hospital or by the state, county, or city department of public health.

(Amended by Stats. 1978, Ch. 843.)

Report to Governing Board

49457. The supervisor of health shall make such reports from time to time as he deems best to the governing board of the school district, or as the board may call for, showing the number of defective children in the schools of the district and the effort made to correct the defects.

(Enacted by Stats. 1976, Ch. 1010.)

Proposed Addition to the Administrative Code

NOTE: The following is the draft of a proposed addition to the *California Administrative Code* that was developed by the Department of Education's School Health Unit working in cooperation with many of the individuals acknowledged on page v of this guide. This draft is now being revised in accordance with instructions from the state's Office of Administrative Law prior to its being resubmitted to the California State Board of Education for adoption and to the Office of Administrative Law for inclusion in the *California Administrative Code, Title 5, Education*. It is included here for information purposes.

Standards and Staffing for Vision Screening Programs. Allocation of qualified supervisors of health as specified in Sections 44871-44878, inclusive, and Section 49452 of the Education Code shall be determined by the amount and type of training, screening, supervision, referral, and follow-up necessary to carry out the intent of the law and these regulations. Training of instructors shall be conducted by ophthalmologists, other licensed physicians, optometrists, credentialed school nurses and public health nurses as defined in these regulations who have received "specialized training" in vision screening. . . Training of screeners shall be conducted by ophthalmologists, other licensed physicians, optometrists, credentialed school nurses, public health nurses and other duly "qualified" personnel who have received training as instructors in keeping with the standards set forth in the guidelines and regulations approved by the State Board of Education. . .

(a) Supervision of the screening shall be conducted only by qualified supervisors of health as specified in Education Code Sections 44871 to 44878, inclusive, and Section 49422, employed by, or under contract with, the district or the county superintendent of schools, or pursuant to contract with any agency authorized to perform such services by the county superintendent of schools of the county in which the district is located pursuant to Sections 1750 to 1754, inclusive, and Section 49452 of the Education Code, and Section 485 of the Health and Safety Code.

(1) The screening shall be conducted only by the individuals "qualified" to supervise the screening, or by certificated employees of the district or the county superintendent of schools who have been qualified by training as defined in the guidelines and regulations adopted by the State Board of Education or pursuant to contract with an agency authorized to perform such services by the county superintendent of schools of the county in which the district is located pursuant to Sections 1750 to 1754, inclusive, and Section 49452 of the Education Code, and Section 485 of the Health and Safety Code, and guidelines established by the State Board of Education. Certificated employees shall be authorized to conduct the screening under the supervision of the supervisor of health as specified in Sections 44871 to 44878, inclusive, and Section 49452 of the Education Code only after they have become "qualified" by appropriate training pursuant to guidelines approved by the State Board of Education.

(2) Vision screening conducted under contract with agencies authorized by the county superintendent of schools shall be conducted only under the supervision of qualified supervisors of health as specified in Sections 44871 to 44878, inclusive, and Section 49452 of the Education Code.

(b) Contract Agencies. Standards and requirements for public, private, profit or non-profit agencies, organizations, individuals or corporations, hereafter referred to as contractors, which seek to enter into a contract with the schools of California for the purpose of providing vision screening services

pursuant to Section 49452 of the California Education Code, and Section 590 of this Article as follows:

(1) The director of an agency providing vision screening services through contracts with the schools of California shall be a "qualified" licensed physician, optometrist, credentialed school, or public health nurse. The director shall have received special training in vision screening according to the requirements of Section 49452 and Section 593 of this Article.

(2) Vision screening services provided by a contract agency shall be given by "qualified" licensed physicians, optometrists, credentialed school nurse, public health nurse, or "qualified" personnel. All screening personnel shall have received in-service training according to Section 592 of this Article.

(c) Vision Screening Services.

(1) All vision screening services shall be conducted in compliance with these vision screening regulations, pursuant to Sections 590—597, inclusive, Article 4.

(2) A school district which enters into a contract for vision screening services shall ensure that all screening and related vision screening services are conducted under the supervision of a supervisor of health as defined in Sections 44871 to 44878 of the Education Code, who is employed either by the district or by the office of the county superintendent of schools, or other duly authorized agency.

(3) The screening shall be conducted for every student in accordance with the Vision Screening Guidelines. Rescreening will be conducted according to Section 594 of this Article.

(4) The contractor shall submit a report of the results of vision screening for each individual screened to the contracting district within ten (10) school days following completion of the screening. The report shall also include, but may not be limited to, the total number screened, and the total number who failed the screening.

(d) Registration of Contractors Providing Vision Screening. The State Department of Education Consultant in School Health Services or designee shall maintain a current list of contracting agencies and their personnel and verify that they have valid credentials and evidence of appropriate training as defined in the Vision Screening Guidelines.

(1) Contracting agencies shall register annually with the county superintendent of schools in each of the counties in which the districts to be served are located pursuant to Sections 1750-1754 and Section 49452 of the Education Code and Section 405 of the California Administrative Code, Title 5. The registration shall include the name, address and qualifications of all vision screening personnel.

(2) The county superintendent of schools shall maintain a current list of all registered contract agencies for the use of school districts.

(3) Contractors providing vision screening services shall have on file in the county office, their credentials and/or certificates authorizing vision screening services.

(4) Based on the qualifications of the contractor, validation of contracts and the approval for payment for services are subject to authorization by the county superintendent of schools prior to the provision of services.

(5) The county superintendent of schools shall require that all vision screening services are provided in compliance with the current vision screening standards in sections 590—597, inclusive, of this Article.

(e) Contracts. Contractual arrangement shall specify responsibilities of both parties agreeing to the contract. The contract shall include, but not be limited to, the following:

(1) Names and qualifications of supervisory personnel-county or district.

(2) Names and qualifications of supervisory personnel-contractor.

(3) Names and qualifications of vision screening personnel.

(4) Description of procedures to be followed.

(5) Content of required reports.

(6) Manner of submission of required reports.

(7) Dates services are to be provided.

(8) Costs and fee arrangements.

(9) Assurance that agency has current authorization from county superintendent of schools.

(f) Procedures. Prior to initiation of the program, parents or guardians must be informed in their primary language about the plan to conduct the program and of their right of refusal to consent for the child's participation. Such refusal must be submitted to the school in writing and shall be honored pursuant to Section 49451 of the Education Code. The vision screening program shall be conducted on all pupils in kindergarten or grade one, and at least every three years thereafter through the eighth grade and prior to behind-the-wheel driver training. The screening shall be conducted on pupils during the regular school day and shall be accomplished in addition to other mandated school health services.

(1) The initial screening on each student shall be conducted under the supervision of "Qualified" supervisors of health as specified in Sections 44871 to 44878, inclusive, and Section 49422 of the Education Code, and in the regulations of this Article, or by other qualified certificated personnel.

(2) Students suspected of having a vision problem found in the initial screening shall be rescreened by qualified supervisors of health as specified in Sections 44871 to 44878, inclusive, and Section 49422 of the Education Code, employed by the district or the county superintendent of schools, or shall be conducted by qualified personnel under the indirect supervision of a qualified supervisor of health.

(3) Qualified certificated employees shall be authorized to conduct the screening under the supervision of the supervisor of health as specified in Sections 44871 to 44878, inclusive, and Section 49422 of the Education Code only after they have become qualified by appropriate training pursuant to regulations and guidelines approved by the State Board of Education.

(4) When a suspected eye condition has been identified as a result of a vision screening, a report shall be made by the supervisor of health to the parent or guardian in their primary language. Such report shall include performance of the Snellen Test and an explanation of the importance of further evaluation. Referral of the pupil and the pupil's parent or guardian to appropriate community resources shall be made pursuant to Sections 49426 and 49456 of the Education Code and in accordance with criteria set forth in this Article.

(5) The supervisor of health shall make an annual report to the governing board of the school district according to the Vision Screening Guidelines pursuant to the California Administrative Code 494; and the State Department of Education Consultant in School Health Services on the forms provided by the State Department of Education. The supervisor of health shall pursue all avenues open for referral and follow-up for correction of suspected eye conditions.

(g) Definitions.

(1) "Qualified" means the ability to demonstrate competence in training skills, screening skills or both.

(2) "Qualified" as an instructor shall mean an ophthalmologist, other licensed physician, optometrist, credentialed school nurse, public health nurse, and other "qualified" personnel.

(3) "Qualified" as a screener shall mean anyone qualified as an instructor, or certificated employees of the district or of the county superintendent of schools who have received training as a screener pursuant to the State Board of Education approved guidelines, or employees of contract agencies who meet the qualifications as screeners set forth in these regulations.

(4) "Supervision" of initial screening for purposes of this program shall mean "indirect supervision" as defined in CAC Title 5, Section 3112.

(5) Training in vision screening shall mean that training which qualifies the screener to perform screening for visual acuity and related functions in a competent and skillful manner.

(6) Specialized training for instructors of vision screeners shall include expanded knowledge about the eye, vision and related functions which shall qualify the instructor to provide specialized training for screeners.

Other Publications Available from the Department of Education

A Guide for Vision Screening in California Public Schools is one of approximately 500 publications that are available from the California State Department of Education. Some of the more recent publications or those most widely used are the following:

American Indian Education Handbook (1982)	\$3.50
Bilingual Program, Policy, and Assessment Issues (1980)	3.25
California Private School Directory	9.00
California Public School Directory	12.50
California Public Schools Selected Statistics	1.50
Criteria for Evaluating the School Health Education Program (1977)	1.00
Criteria for Evaluating the School Health Services Program (1982)	1.50
Curriculum Design for Parenthood Education (1982)	4.00
Guide for Vision Screening in California Public Schools (1984)	2.50
Guide to School and Community Action (1981)	1.75
Guidelines and Procedures for Meeting the Specialized Health Care Needs of Students (1980)*	2.50
Guidelines for Proficiency Tests (1982)	2.00
Guidelines for School-Based Alcohol and Drug Abuse Programs (1981)	1.00
Handbook for Planning an Effective Mathematics Program (1982)	2.00
Handbook for Planning an Effective Reading Program (1983)	1.50
Handbook for Planning an Effective Writing Program (1983)	2.50
Health Instruction Framework for California Public Schools (1978)	1.35
History—Social Science Framework for California Public Schools (1981)	2.25
Improving the Human Environment of Schools (1979)	2.50
Improving Writing in California Schools: Problems and Solutions (1983)	2.00
Mathematics Framework for California Public Schools, with 1980 Addendum (1984)	2.00
Monograph on Staff Development (1980)	1.50
New Err. in Special Education: California's Master Plan in Action (1980)	2.00
Pedestrian Rules of the Road in California—Primary Edition (1980)	1.50
Physical Performance Test for California (1982 Revision) (1984)	1.50
Raising Expectations: Model Graduation Requirements (1983)	2.75
Reading Framework for California Public Schools (1980)	1.75
Relationship Between Nutrition and Student Achievement, Behavior, and Health (1980)	4.00
Science Education for the 1980s (1982)	2.00
Science Framework for California Public Schools (1978)	1.65
Statement on Competencies in English and Mathematics Expected of Entering Freshmen (1982)	2.50
Student Achievement in California Schools	2.00
Teaching About Sexually Transmitted Diseases (1980)	1.65
Techniques for Preventing the Spread of Infectious Diseases (1983)	1.50
Toward More Human Schools (1981)	1.75
Visual and Performing Arts Framework for California Public Schools (1982)	3.25

Orders should be directed to:

California State Department of Education
P.O. Box 271
Sacramento, CA 95802

Remittance or purchase order must accompany order. Purchase orders without checks are accepted only from government agencies in California. Sales tax should be added to all orders from California purchasers.

A complete list of publications available from the Department may be obtained by writing to the address listed above.

*Includes 1982 and 1983 revisions.